

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

DETMOLIN F

Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Pesticide

Details of the supplier of the safety data sheet

FROWEIN GmbH & Co. KG

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SECTION 2: Hazards identification

Classification of the substance or mixture

Indications of danger : Harmful, Dangerous for the environment

R-phrases:

Flammable.

Harmful by inhalation and if swallowed.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Harmful: may cause lung damage if swallowed.

Repeated exposure may cause skin dryness or cracking.

Label elements

Danger symbols:

Xn - Harmful; N - Dangerous for the environment



Xn - Harmful



N - Dangerous for the environment

R phrases

- | | |
|-------|--|
| 10 | Flammable. |
| 20/22 | Harmful by inhalation and if swallowed. |
| 50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| 65 | Harmful: may cause lung damage if swallowed. |
| 66 | Repeated exposure may cause skin dryness or cracking. |

S phrases

- | | |
|-------|---|
| 02 | Keep out of the reach of children. |
| 13 | Keep away from food, drink and animal feedingstuffs. |
| 23 | Do not breathe spray . |
| 28 | After contact with skin, wash immediately with plenty of Water . |
| 38 | In case of insufficient ventilation, wear suitable respiratory equipment. |
| 60 | This material and its container must be disposed of as hazardous waste. |
| 61 | Avoid release to the environment. Refer to special instructions / Safety data sheets. |
| 62 | If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. |
| 20/21 | When using do not eat, drink or smoke. |
| 36/37 | Wear suitable protective clothing and gloves. |

Hazardous components which must be listed on the label

Dichlorvos

Alkanes C9-C12-iso

Biocide registry number: BAuA-Reg. Nr. N-11262

Additional advice on labelling

Labelling on the basis of toxicological data (pls. see item 11) and using the conventional method (assessment procedure)

Other hazards

Vapours may form explosive mixture with air.

SECTION 3: Composition/information on ingredients

Mixtures

Chemical characterization

Preparation in aliphatic hydrocarbons

Hazardous components

292-459-0	Alkanes C9-C12-iso	< 85 %
90622-57-4	Xn R53-65-66	
	Flam. Liq. 3, Asp. Tox. 1, Aquatic Chronic 4; H226 H304 H413	
01-2119472146-39		
200-547-7	Dichlorvos	< 5 %
62-73-7	T+, T, N R26-24/25-43-50	
015-019-00-X	Acute Tox. 2, Acute Tox. 3, Acute Tox. 3, Skin Sens. 1, Aquatic Acute 1; H330 H311 H301 H317 H400	
232-319-8	Pyrethrum	< 1 %
8003-34-7	N, Xn R20/21/22-50-53	

Full text of R- and H-phrases: see section 16.

SECTION 4: First aid measures

Description of first aid measures

General information

Remove contaminated soaked clothing immediately.

If you feel unwell, seek medical advice.

After inhalation

Move to fresh air in case of accidental inhalation of vapours or decomposition products.

Consult a physician.

After contact with skin

Wash off immediately with plenty of water and soap for at least 15 minutes.

Consult a physician.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Consult (eye) doctor immediately.

After ingestion

Summon a doctor immediately.

Do not induce vomiting.

Immediately give plenty of water (if possible charcoal slurry).

Induce vomiting only upon the advice of a physician.

Attention. Beware, danger of aspiration.

Most important symptoms and effects, both acute and delayed

Harmful by inhalation and if swallowed.

Harmful: may cause lung damage if swallowed.

Repeated exposure may cause skin dryness or cracking.

Indication of any immediate medical attention and special treatment needed

Treat symptoms.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media

Foam, carbon dioxide (CO₂), dry chemical, water-spray.

Extinguishing media which must not be used for safety reasons

Full water jet.

Special hazards arising from the substance or mixture

Fire may produce:
Chlorine compounds.
Carbon monoxide (CO), carbon dioxide (CO₂), sulphur oxides (SO_x) and phosphorus oxides (PO_x).

Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

Additional information

Vapours are heavier than air and spread along ground.
Do not release chemically contaminated water into drains, soil or surface waters. Sufficient measures must be taken to retain water used for extinguishing.
The vapour/air mixture is explosive, even in empty, uncleaned receptacles.
Cool containers at risk with water spray jet.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

In case of vapour formation use respirator.
Use only explosion-proof equipment.
Ensure adequate ventilation.
Remove persons to safety.
Use personal protective clothing.

Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).
Shovel into suitable container for disposal.
Clean contaminated surface thoroughly.

Reference to other sections

Observe protective instructions (see Sections 7 and 8).
Information for disposal look up chapter 13.

SECTION 7: Handling and storage

Precautions for safe handling

Advice on safe handling

Keep container tightly closed.
Vapours are heavier than air and spread along ground.
Avoid contact with the skin and the eyes.
In case of insufficient ventilation, especially in confined areas.
Do not breathe vapours or spray mist.

Advice on protection against fire and explosion

Do not smoke - volatile.
Keep away from heat and sources of ignition.
Take precautionary measures against static discharges.
Pay attention to anti-explosion rules.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a dry, cool and well-ventilated place.
Pay attention to anti-explosion rules.

Advice on storage compatibility

Incompatible with oxidizing agents.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

Specific end use(s)

Pesticide

SECTION 8: Exposure controls/personal protection

Control parameters

Exposure limits (EH40)

CAS No	Chemical name	ml/m³	mg/m³	F/ml	Category	Origin
62-73-7	Dichlorvos (ISO) (OLD)	0.1	0.92		TWA (8 h)	OES
		0.3	2.8		STEL (15 min)	OES
8003-34-7	Pyrethrum (purified of sensitising lactones)	-	1		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

Exposure controls

Occupational exposure controls

Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures

Wash hands before breaks and immediately after handling the product.

When using, do not eat, drink or smoke.

Treat subsequently with skin cream.

Take off immediately all contaminated clothing.

Avoid contact with skin, eyes and clothing.

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A).

Hand protection

Use multipurpose protective gloves (plant protection) when spreading/handling the product.

Eye protection

Tightly fitting goggles.

Eye wash bottle with pure water.

Skin protection

Wear standard protective suit (plant protection) when spreading/handling the product. Rubber apron.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Clear
Odour:	Hydrocarbon-like

Test method

Changes in the physical state

Boiling point:	150 - 180 °C
Flash point:	42,5 °C Abel-Pensky (DIN 51755)
Lower explosion limits:	0,6 vol. %
Upper explosion limits:	7 vol. %
Ignition temperature:	> 200 °C
Vapour pressure:	3 hPa
(at 20 °C)	
Density (at 20 °C):	0,8 g/cm³
Water solubility:	Immiscible
(at 20 °C)	
Solvent content:	approx. 95%

SECTION 10: Stability and reactivity

Reactivity

No decomposition if stored and applied as directed.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

Reactions with oxidizing agents.

Conditions to avoid

To avoid thermal decomposition, do not overheat.
Vapour/air mixtures are explosive at intensive warming.
Heating can release vapours which can be ignited.

Incompatible materials

oxidizing agents

Hazardous decomposition products

Chlorine compounds.
Carbon monoxide (CO), carbon dioxide (CO₂), sulphur oxides (SO_x) and phosphorus oxides (PO_x).

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

LD₅₀/oral/rat: = 807 - 923 mg/kg [OECD 401] [Harmful if swallowed.]
LD₅₀/dermal/rat: > 2000 mg/kg (Limit-test) [OECD 402]
LC₅₀/inhalation/rat: = 12,40 - 13,74 mg/l/4h [OECD 403] [Harmful by inhalation.]

Irritation and corrosivity

Skin irritation (rabbit): Slightly irritating. [OECD 404]
Eyes irritation (rabbit): Slightly irritating. [OECD 405]

Sensitising effects

Guinea pig: Non-sensitizing [OECD 406]

Severe effects after repeated or prolonged exposure

Aspiration hazard: Harmful: may cause lung damage if swallowed.

Carcinogenic/mutagenic/toxic effects for reproduction

Carcinogenicity: Not classified.
Mutagenicity: Not classified.
Reproductive toxicity: Not classified.

Additional information on tests

Classification in compliance with the assessment procedure specified in the EC guidelines 1999/45/EG.

Empirical data on effects on humans

Repeated exposure may cause skin dryness or cracking.
High concentration of vapours may cause irritation to eyes and respiratory system and produce narcotic effects .
Occasionally literature hints report that contact with Pyrethrum compounds may trigger hay fever similar reactions in particularly sensible persons.

SECTION 12: Ecological information

Toxicity

Dichlorvos
LC₅₀/Rainbow trout/96 h = 0,2 mg/l
Pyrethrum
LC₅₀/Rainbow trout/96 h = 0,0052 mg/l

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Results of PBT and vPvB assessment

No data available.

Other adverse effects

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Severe hazard to waters

Further information

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

Waste treatment methods

Advice on disposal

Where possible recycling is preferred to disposal.

Can be incinerated, when in compliance with local regulations.

Waste disposal number of waste from residues/unused products

200119 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); pesticides
Classified as hazardous waste.

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances
Classified as hazardous waste.

Contaminated packaging

Re-using the polluted packaging materials is not allowed.

Contaminated packagings are to be treated like the product itself.

SECTION 14: Transport information

Land transport (ADR/RID)

<u>UN number:</u>	UN3295
<u>UN proper shipping name:</u>	HYDROCARBONS, LIQUID, N.O.S.
<u>Transport hazard class(es):</u>	3
<u>Packing group:</u>	III
Hazard label:	3



Classification code:	F1
Limited quantity:	5 L / 30 kg
Transport category:	3
Hazard No:	30
Tunnel restriction code:	D/E

Inland waterways transport

<u>UN number:</u>	UN3295
<u>UN proper shipping name:</u>	HYDROCARBONS, LIQUID, N.O.S.
<u>Transport hazard class(es):</u>	3
<u>Packing group:</u>	III
Hazard label:	3



Classification code:	F1
Limited quantity:	5 L / 30 kg

Marine transport

<u>UN number:</u>	3295
<u>UN proper shipping name:</u>	HYDROCARBONS, LIQUID, N.O.S. (dichlorvos)
<u>Transport hazard class(es):</u>	3
<u>Packing group:</u>	III
Hazard label:	3



Marine pollutant: P
Limited quantity: 5 L / 30 kg
EmS: F-E; S-D

Air transport

UN/ID number: UN3295
UN proper shipping name: HYDROCARBONS, LIQUID, N.O.S.
Transport hazard class(es): 3
Packing group: III
Hazard label: 3



Limited quantity Passenger: Y344 / 10 L
IATA-packing instructions - Passenger: 355
IATA-max. quantity - Passenger: 60 L
IATA-packing instructions - Cargo: 366
IATA-max. quantity - Cargo: 220 L

Environmental hazards

Dangerous for the environment: yes



Special precautions for user

Handle in accordance with good industrial hygiene and safety practice.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

The transport takes place only in approved and appropriate packaging.

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

1999/13/EC (VOC): < 85 %

National regulatory information

Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

Water contaminating class (D): 3 - highly water contaminating

Chemical Safety Assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Full text of R-phrases referred to under sections 2 and 3

- | | |
|----------|--|
| 10 | Flammable. |
| 20/21/22 | Harmful by inhalation, in contact with skin and if swallowed. |
| 20/22 | Harmful by inhalation and if swallowed. |
| 24/25 | Toxic in contact with skin and if swallowed. |
| 26 | Very toxic by inhalation. |
| 43 | May cause sensitization by skin contact. |
| 50 | Very toxic to aquatic organisms. |
| 50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| 53 | May cause long-term adverse effects in the aquatic environment. |
| 65 | Harmful: may cause lung damage if swallowed. |
| 66 | Repeated exposure may cause skin dryness or cracking. |

DETMOLIN F

00434-0009

Full text of H-Statements referred to under sections 2 and 3

H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H317	May cause an allergic skin reaction.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H413	May cause long lasting harmful effects to aquatic life.

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)